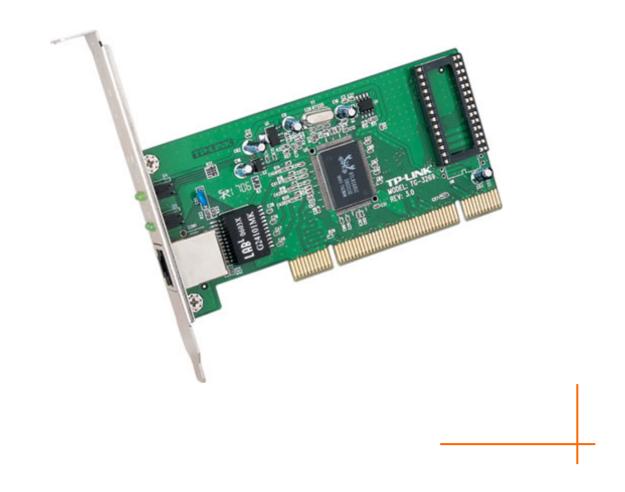
TP-LINK®

User Guide

TG-3269

Gigabit PCI Network Adapter



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http://www.tp-link.com

FCC STATEMENT

FC

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference.
- 2) This device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not Expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CE Mark Warning

This is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

TP-LINK TP-LINK TECHNOLOGIES CO., LTD

DECLARATION OF CONFORMITY

For the following equipment:

Product Description: Gigabit PCI Network Adapter

Model No.: TG-3269

Trademark: TP-LINK

We declare under our own responsibility that the above products satisfy all the technical regulations applicable to the product within the scope of Council Directives:

Directives 2004 / 108 / EC, Directives 2006 / 95 / EC

The above product is in conformity with the following standards or other normative documents

EN 55022:2006+A1:2007

EN 55024:1998+A1:2001+A2:2003

EN 61000-3-2:2006+A1:2009+A2:2009

EN 61000-3-3:2008

EN 60950-1:2006+A11:2009+A1:2010

The product carries the CE Mark



Person is responsible for marking this declaration:

Yang Hongliang

Product Manager of International Business

Date of Issue: 2012

TP-LINK TECHNOLOGIES CO., LTD.

Building 24 (floors 1, 3, 4, 5), and 28 (floors 1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China

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Package Contents

The following contents should be found in your box:

- > One TG-3269 Gigabit PCI Network Adapter
- > Quick Installation Guide
- > One Resource CD for TG-3269, including:
 - Drivers
 - User Guide
 - Other Helpful Information

P Note:

Make sure that the package contains the above items. If any of the listed items is damaged or missing, please contact your distributor.

Conventions

The "Adapter" mentioned in this user guide stands for TG-3269 Gigabit PCI Network Adapter without any explanations.

Chapter 1. Introduction

1.1 Overview of the product

TG-3269 is a highly integrated and cost-effective single-chip Gigabit Ethernet Adapter that provides 32-bit performance, PCI bus master capability, and full compliance with IEEE 802.3 10Base-T, IEEE802.3u 100Base-TX and IEEE 802.3ab 1000Base-T specifications. It also supports ACPI, PCI power management for modern operating systems that are capable of Operating System Directed Power Management (OSPM) to achieve the most efficient power management.

Through the aid of a VLAN membership, TG-3269 adheres to the 802.1Q for multiple VLAN support, and 802.1P for packet prioritization. With 802.1Q support, server resources can be shared with multiple VLANs when used in conjunction with any 802.1Q-enabled Switch. With the 802.1p support, TG-3269 allows a range of Ethernet packets to be prioritized from a critical to a non-critical designation through a priority tag.

TG-3269 supports Full Duplex operations at 10/100/1000 Mbps data speeds used in conjunction with 802.3x flow control support. With 802.3x flow control TG-3269 uses both asymmetric and symmetric functions via the MAC control pause function. Any participating 802.3x flow control node can be controlled by initiating a pause control to stop incoming network traffic, to further reduce network congestion.

By default TG-3269 supports the standard 1518 Byte frame size. In addition, TG-3269 can also be configured to use a maximum Jumbo Frame size of up to 7680 Bytes.

It includes an interface for a boot ROM and can be used in diskless workstations, providing maximum network security and ease of management.

Also, being PCI 2.2 and 2.3 compliant, TG-3269 works with 32-bit 33/66MHz PCI busses. This compatibility provides users with an easy migration path to increase performance between servers and workstations for large file transfer, video editing and server clustering for data intensive applications.

1.2 Features

- > Integrated Ethernet MAC, Physical chip and transceiver in one chip
- Complies with the IEEE802.1P, IEEE802.1Q, IEEE802.3 10Base-T, IEEE802.3u 100Base-TX and IEEE802.3ab 1000Base-T standard
- Compliant to PCI Revision 2.1/2.2/2.3
- Supports Full Duplex Flow Control (IEEE 802.3x)

- > PCI local bus single-chip Ethernet controller
- Supports ACPI, PCI power management
- > Supports Auto-Negotiation function, Auto-detects network speed
- > Contains two large independent receive and transmit FIFOs
- > One STP/UTP connector
- Provides LEDs to indicate network Link/Activity/Speed/ Duplex
- Supports smart remote boot ROM
- Supports Drivers for Linux-2.4.x, Linux-2.6.x, Windows 7 (32bit/ 64bit), Windows XP, Windows 2000, and Windows Vista (32bit/ 64bit)

1.3 LED Status

> 10 LED, 100 LED, 1000 LED

They all indicate Link/Active/Speed status. When the 1000 LED is lit, it indicates adapter has been linked to network with the right speed of 1000Mbps. The flash 1000 LED indicates data transmission at the responding port. The 10 LED and 100 LED are similar to the 1000 LED.

> FDX LED

It indicates the status that whether or not the adapter works at full duplex mode. When the LED is lit the adapter works at full duplex mode. Otherwise the adapter works at half duplex mode.

Chapter 2. Installation Guide

2.1 Hardware Installation

To install the adapter, please follow these steps listed below:

- 1. Turn off your computer and unplug the power cord and all cables.
- 2. Remove your computer's case cover.
- 3. Locate an available PCI slot.
- 4. Remove the screw that secures the back plate (the small piece of metal that covers the opening for PCI card on the back panel of your computer), then remove the back plate.
- 5. Carefully insert the adapter into the PCI slot. Do not touch the metal connector on the adapter.
- 6. Secure the adapter to the case using the screw you removed from the back plate.
- 7. Reinstall your computer's case cover.
- 8. Plug in the power cord and other cables, and then turn on your computer.

Note:

When the hardware has been successfully installed on your computer, you will be prompted 'Found New Hardware Wizard' (as shown in Figure 2-1 and Figure 2-2); please click Cancel, and then follow the Software Installation steps to install driver for your adapter.

Found New Hardware Wizard			
	Welcome to the Found New Hardware Wizard		
	This wizard helps you install software for:		
	Realtek RTL8169/8110 Family PCI Gigabit Ethernet NIC (NDIS 6.20)		
	If your hardware came with an installation CD or floppy disk, insert it now.		
	What do you want the wizard to do?		
	 Install the software automatically (Recommended) 		
	Install from a list or specific location (Advanced)		
	Click Next to continue.		
	< Back Next > Cancel		

Figure 2-1 Found New Hardware Wizard in Windows XP



Figure 2-2 Found New Hardware Wizard in Windows Vista

2.2 Software Installation

The section will guide you through the installation procedures for Windows XP, Windows 7, and Windows Vista. Please carefully follow the steps.

2.2.1 For Windows XP

- 1. Insert the TP-LINK Resource CD into the CD-ROM drive.
- 2. Right-click the icon **My Computer** on the desktop, and then click **Manage**.





3. The Computer Management screen will appear as shown in Figure 2-4. Click Device Manager, and then you will see the various options on the right. Click Network adapters, and then from the drop-down list please find the new network adapter Realtek RTL 8169/8110 Family PCI Gigabit Ethernet NIC (NDIS 6.20) you have installed. Right-click it, and then select Update Driver....

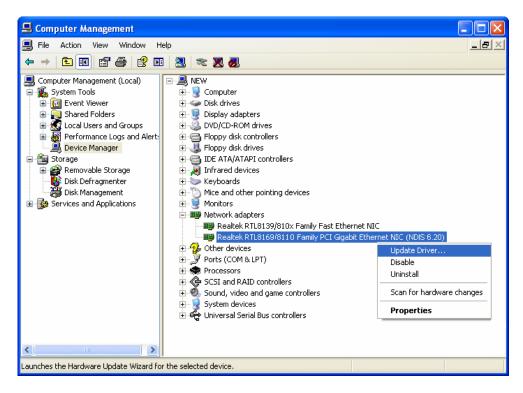


Figure 2-4

4. The Hardware Update Wizard window will show up as shown in Figure 2-5. Select Install from a list or specific location [Advanced], and then click Next.



Figure 2-5

5. Select Don't search. I will choose the driver to install, and then click Next.

Hardware Update Wizard
Please choose your search and installation options.
Search for the best driver in these locations.
Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed.
Search removable media (floppy, CD-ROM)
Include this location in the search:
C:\Documents and Settings\English\Desktop\11053 💊 🛛 Browse
Onn't search. I will choose the driver to install.
Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware.
< Back Next > Cancel

Figure 2-6

6. Click Have Disk....

Hardware Update Wizard
Select Network Adapter Which network adapter do you want to install?
Click the Network Adapter that matches your hardware, then click OK. If you have an installation disk for this component, click Have Disk.
Show compatible hardware
Network Adapter:
Realtek RTL8169/8110 Family PCI Gigabit Ethernet NIC (NDIS 6.20)
This driver is digitally signed. <u>Tell me why driver signing is important</u>
< Back Next > Cancel

Figure 2-7

7. Click Browse....

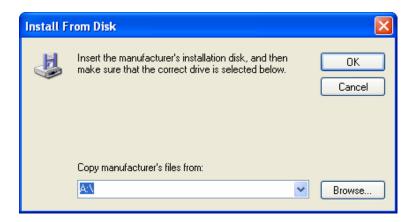


Figure 2-8

8. Find the right product model (**TG-3269**) and operation system (**Windows XP**) in the resource CD directory and choose the **.inf** file, and then click **Open**.

Locate File						? 🛛
Look in:	🚞 Windows XP		*	G 💋	ب	
My Recent Documents	Netrtlx.inf					
Desktop						
My Documents						
My Computer						
	File name:	Netrtlx.inf			~	Open
My Network	Files of type:	Setup Information (*.inf)			~	Cancel

Figure 2-9

9. Back to the Install From Disk screen, click OK.

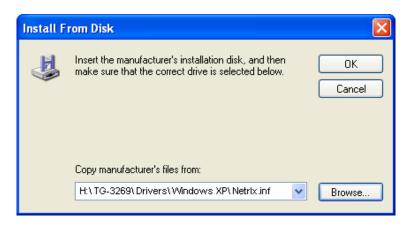


Figure 2-10

10. Click Next.

Hardware Update Wizard
Select Network Adapter Which network adapter do you want to install?
Click the Network Adapter that matches your hardware, then click OK. If you have an installation disk for this component, click Have Disk.
Show compatible hardware
Network Adapter:
TP-LINK Gigabit PCI Network Adapter
This driver is not digitally signed! Have Disk Have Disk
< Back Next > Cancel

Figure 2-11

11. The **Hardware Installation** screen will pop up as shown in Figure 2-12; select **Continue Anyway**.



Figure 2-12

12. Wait a few seconds for the installation.

Hardware Update Wizard				
Please wai	it while the wizard installs the software			
	TP-LINK Gigabit PCI Network Adapter			
	Image: System 32 \DRIVERS			
	< Back Next > Cancel			

Figure 2-13

13. Click **Finish** to complete the installation.

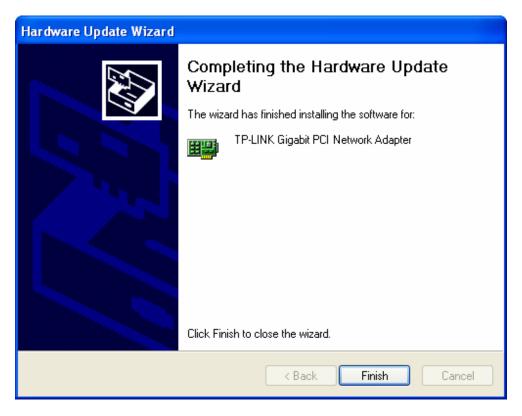


Figure 2-14

2.2.2 For Windows 7

- 1. Insert the TP-LINK Resource CD into the CD-ROM drive.
- 2. Right-click the icon **Computer** on the desktop, and then click **Manage**.



Figure 2-15

3. The Computer Management screen will appear as shown in Figure 2-16. Click Device Manager, and then you will see the various options on the right. Click Network adapters, and then from the drop-down list please find the new network adapter Realtek RTL 8169/8110 Family PCI Gigabit Ethernet NIC (NDIS 6.20) you have installed. Right-click it, and then select Update Driver Software....

🔚 Computer Management			
File Action View Help			
🗢 🄿 🗡 🖬 🗎 🚺	10 🕅 🙀 👘		
🌆 Computer Management (Local	a 🚔 english-PC		Actions
A 🙀 System Tools	⊳ 1. Image: Second Sec		Device Manager 🔺
 D Task Scheduler W Event Viewer Shared Folders 	 → → Disk drives > → → Display adapters > → → DE ATA/ATAPI controllers 		More Actions
Mareu Forders Mareu Forders Mareu Forders Mareu Forders	> - Controllers		
Performance	Mice and other pointing devices		
🚔 Device Manager	Monitors		
a 😫 Storage	A Setwork adapters		
Disk Management	Realtek 8185 Extensible 802.11b/g Wireless Device #2		
Bervices and Applications	Realtek RTL8169 / 8110 Family PCI Gigabit Ethernet NIC (ND Description of the content of the co	Update Driver Software	
	Ethernet Controller	Disable	
	Ports (COM & LPT)	Uninstall	
	Processors	Scan for hardware changes	
	Sound, video and game controllers	Scall for hardware changes	
	Image: System devices Image: Image	Properties	
	p Universal senal bus controllers		
4			
Launches the Update Driver Software	Wizard for the selected device.		

Figure 2-16

4. The next screen will appear as shown in Figure 2-17. Select **Browse my computer for driver software**.

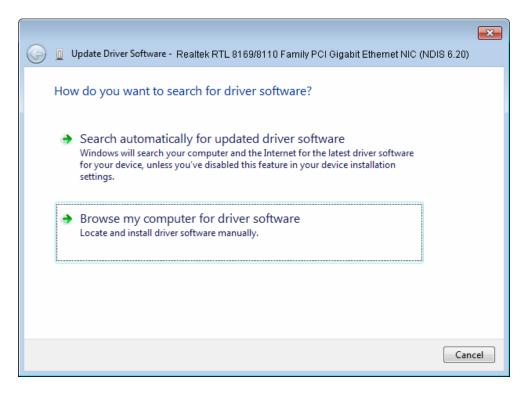


Figure 2-17

5. Select Let me pick from a list of device drivers on my computer, and then click Next.

		ĸ
\bigcirc	Update Driver Software - Realtek RTL 8169/8110 Family PCI Gigabit Ethernet NIC (NDIS 6.20)	
	Browse for driver software on your computer	
	Search for driver software in this location:	
	C:\Users\english\Documents	
	✓ Include subfolders	
	Let me pick from a list of device drivers on my computer This list will show installed driver software compatible with the device, and all driver software in the same category as the device.	
	Next Cancel	

Figure 2-18

6. Click **Have Disk...** in the screen as shown in Figure 2-19.

		×
\bigcirc	Update Driver Software - Realtek RTL 8169/8110 Family PCI Gigabit Ethernet NIC (NDIS 6.20)	
	Select Network Adapter Click the Network Adapter that matches your hardware, then click OK. If you have an installation disk for this feature, click Have Disk.	
	Show compatible hardware	
	Network Adapter:	
	🔄 Realtek RTL 8169/8110 Family PCI Gigabit Ethernet NIC (NDIS 6.20)	
	This driver is digitally signed.	
	Tell me why driver signing is important	
	Next Cano	el

Figure 2-19

7. Click **Browse...** in the **Install From Disk** window as shown in Figure 2-20.

Install Fro	m Disk	X
\$	Insert the manufacturer's installation disk, and then make sure that the correct drive is selected below.	OK Cancel
	Copy manufacturer's files from:	Browse

Figure 2-20

8. Find the right product model (**TG-3269**) and operation system (**Windows 7**) in the resource CD directory and choose the **.inf** file, and then click **Open**.

🛃 Locate File				×
Look in:	🔋 Windowns 7	32bit 👻	G 🤌 📂 🛄 🗸	
Ca	Name	*	Date modified	Туре
Recent Places	netrtx32.inf		6/12/2010 6:01 PM	Setup Infc
Desktop				
Libraries				
Computer				
	4			•
Network	File name:	netrtx32.inf		
	Files of type:	Setup Information (*.inf)	- -	Open Cancel

Figure 2-21

9. Back to the **Install From Disk** window as shown in Figure 2-22, click **OK**.

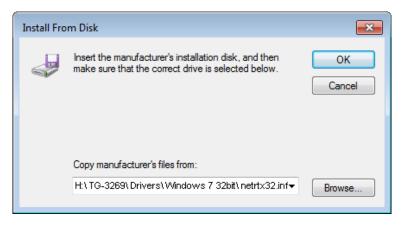


Figure 2-22

10. Click Yes in the Update Driver Warning window to continue the installation.



Figure 2-23

11. Click Next in the next screen as shown in Figure 2-24.

0	0	Upda	ate Driv	er Sof	tware -	Realf	tek RT	°L 811	69/81	110 Fa	amily l	PCIO	igabi	t Ethe	ernet I	NIC (I	NDIS	6.20)		<u> </u>
	Sel	lect I	Click	the Ne		er Adapte r this fe						are, th	en clie	ck OK	. If yo	ou hav	/e an			
			<mark>k Adap</mark> INK Gij		°CI Ne	twork A	∖dapte	er												
	<u>^</u>				-	ally sign ing is in		ant							(Н	ave D	Disk		
																Vext		Can	cel	

Figure 2-24

12. Select **Install this driver software anyway** in the **Windows Security** window as shown in Figure 2-25.



Figure 2-25

13. Wait a few seconds for the installation.

× 1
🕞 🗕 Update Driver Software - Realtek RTL 8169/8110 Family PCI Gigabit Ethernet NIC (NDIS 6.20)
Installing driver software

Figure 2-26

14. Click **Close** to complete the installation.

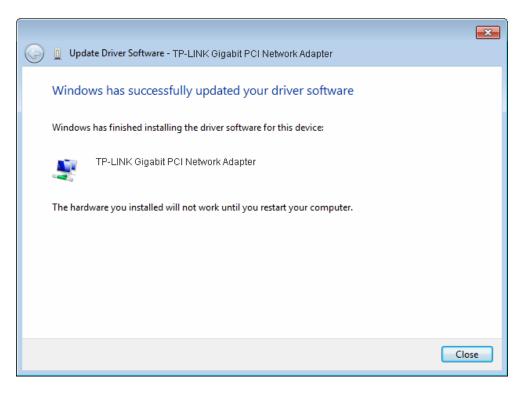


Figure 2-27

15. Click **Yes** in the **System Settings Change** window (as shown in Figure 2-28) to restart the computer, so that the installation will take effect.

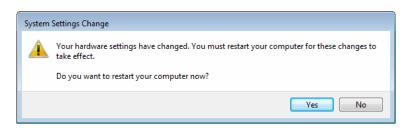


Figure 2-28

2.2.3 For Windows Vista

- 1. Insert the TP-LINK Resource CD into the CD-ROM drive.
- 2. Right-click the icon **Computer** on the desktop, and then click **Manage**.





3. The Computer Management screen will appear as shown in Figure 2-30. Click Device Manager, and then you will see the various options on the right. Click Network adapters, and then from the drop-down list please find the new network adapter Realtek RTL 8169/8110 Family PCI Gigabit Ethernet NIC (NDIS 6.20) you have installed. Right-click it, and then select Update Driver Software....

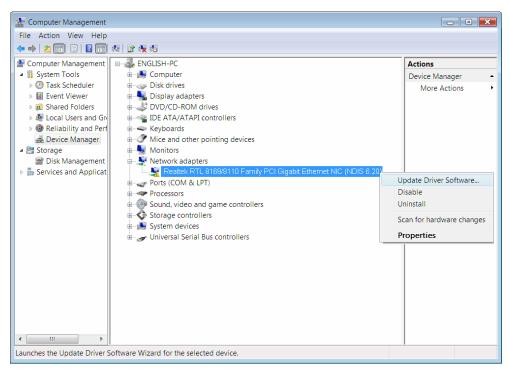


Figure 2-30

4. The next screen will appear as shown in Figure 2-31. Select **Browse my computer for** driver software.

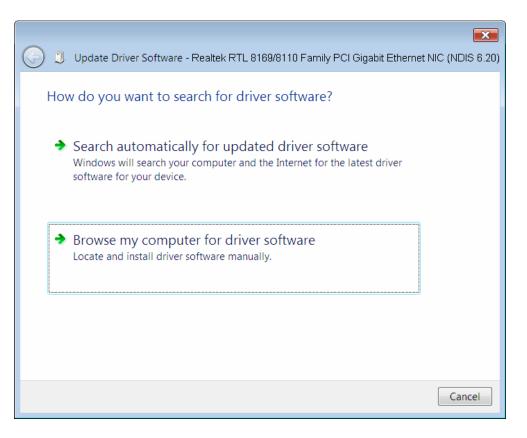


Figure 2-31

5. Select Let me pick from a list of device drivers on my computer, and then click Next.

Update Driver Software - Realtek RTL 8169/8110 Family PCI Gigabit Ethernet NIC (NDIS 6.20)
Browse for driver software on your computer
Search for driver software in this location: C:\Users\english\Desktop Browse Include subfolders
Let me pick from a list of device drivers on my computer This list will show installed driver software compatible with the device, and all driver software in the same category as the device.
Next Cancel

Figure 2-32

6. Click **Have Disk...** in the screen as shown in Figure 2-33.

	×
G I Update Driver Software - Realtek RTL 8169/8110 Family PCI Gigabit Ethernet NIC (NDIS 6	.20)
Select Network Adapter Click the Network Adapter that matches your hardware, then click OK. If you have an installation disk for this feature, click Have Disk.	
 Show compatible hardware Network Adapter: Realtek RTL 8169/8110 Family PCI Gigabit Ethernet NIC (NDIS 6.20) Realtek RTL 8169/8110 Family PCI Gigabit Ethernet NIC (NDIS 6.20) 	
This driver is digitally signed. Have Disk <u>Tell me why driver signing is important</u>	
Next Cancel	

Figure 2-33

7. Click Browse... in the Install From Disk window as shown in Figure 2-34.

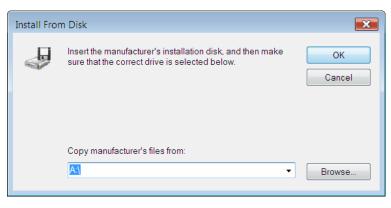


Figure 2-34

8. Find the right product model (**TG-3269**) and operation system (**Window Vista**) in the resource CD directory and choose the **.inf** file, and then click **Open**.

攝 Locate File							×
Look in:	👢 Windows Vi	sta 32bit	G 🏚 📂 🖽 🗸				
Recent Places Pesktop Desktop english Computer	Name netrtx32.INF	Date modif	Type	Size			
Network	File name: Files of type:	netrtx32.INF Setup Inform				▼ ▼	Open Cancel

Figure 2-35

9. Back to the Install From Disk window as shown in Figure 2-36, click OK.

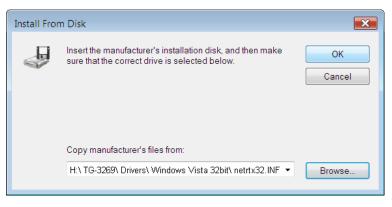


Figure 2-36

10. Click **Yes** in the **Update Driver Warning** window to continue the installation.



Figure 2-37

11. Click Next in the next screen as shown in Figure 2-24.

			×
\bigcirc	IJ	Update Driver Software - Realtek RTL 8169/8110 Family PCI Giga	bit Ethernet NIC (NDIS 6.20)
	Sele	ect Network Adapter	
	4	Click the Network Adapter that matches your hardware, then click OK. disk for this feature, click Have Disk.	lf you have an installation
l	🗸 Sh	now compatible hardware	
	_	work Adapter. TP-LINK Gigabit PCI Network Adapter	
	Â	This driver is not digitally signed! Tell me why driver signing is important	Have Disk
			Next Cancel

Figure 2-38

12. Select **Install this driver software anyway** in the **Windows Security** window as shown in Figure 2-39.



Figure 2-39

13. Wait a few seconds for the installation.

Update Driver Software - Realtek RTL 8169/8110 Family PCI Gigabit Ethernet NIC (NDIS 6.20)
Installing driver software

Figure 2-40

14. Click **Close** to complete the installation.

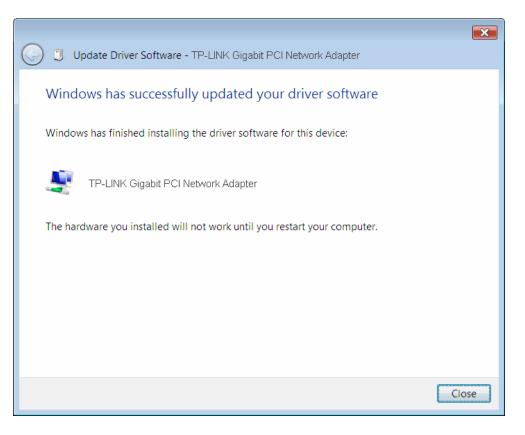


Figure 2-41

15. Click **Yes** in the **System Settings Change** window (as shown in Figure 2-42) to restart the computer, so that the installation will take effect.



Figure 2-42

Appendix A: Specifications

Normal							
Interface	32-bit PCI interface						
Standards	IEEE802.1P, IEEE802.1Q, IEEE802.3 10Base-T, IEEE802.3u 100Base-TX, IEEE 802.3ab 1000Base-T						
Software	Drivers for Linux-2.4.x, Linux-2.6.x, Windows 7 (32bit / 64bit), Windows Vista (32bit / 64bit), Windows XP, Windows 2000						
Transmission Rate	10/100/1000Mbps						
Hardware	IBM PC compatibles(it must have PCI slot)						
Connector Supported	RJ45						
IRQ Line	Assigned by system						
I/O Address	Assigned by system						

Environmental and Physical							
Temperature	0°C ~ 40°C (Operating)						
Humidity	10% ~ 90%, Non-condensing						
Power consumption	4W (Max)						

Appendix B: Troubleshooting

1. What should I do if PC cannot find the new hardware?

Check to see if the network adapter is inserted in the PCI slot properly; otherwise, please reinsert the adapter.

If the problem remains, please try to change another PCI slot.

2. What should I do if PC cannot identify the new hardware?

If you couldn't find the network adapter you've installed by going to "(My) Computer > Manager > Device Manager > Network Adapter >..."; please go to "(My) Computer > Manager > Device Manager > Other devices > Ethernet Controller", and then follow the rest steps of software installation to update driver.

